Florida's Proposal to Pilot a Growth Model for AYP under NCLB

OVERVIEW

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Florida's Proposal to Pilot a Growth Model for AYP under NCLB

Overview of Florida's Growth Model

Florida's proposed model for determining Adequate Yearly Progress (AYP) uses a combination of annual proficiency/improvement status, safe harbor, and growth in student performance to hold schools and districts, as well as the state, accountable for reaching 100 percent student proficiency by 2013-14.

Currently in Florida, a school will make AYP if all of its subgroups meet the state's annual measurable objectives in reading and mathematics and attain at least 95 percent participation on the Florida Comprehensive Assessment Test (FCAT), or an alternate assessment, and if the school meets the "other" indicator writing, with 90 percent at a 3.0 and the graduation rate of at least 85 percent or improvement of at least 1 percent for these two criteria. If one or more subgroups do not meet the state measurable objectives in reading or mathematics, the "safe harbor" criteria are applied. These criteria require that the school demonstrate, for each of the subgroups that did not meet the state proficiency objectives, that the percent of "non-proficient" students decreased by 10 percent. In addition, the subgroup(s) must have met the total schools writing and graduation rate criteria, as well as the subgroups, and each subgroup must have attained at least 95 percent participation in the assessment. This process, as well as Florida's current proficiency benchmarks, is detailed in Florida's approved Accountability Workbook.

The proposed growth model provides schools and districts with a way to make AYP when students are "on track to be proficient" based on a "three-year growth trajectory". Simply put, a student's current and prior year assessment data will be used to determine if the current rate of student learning applied to the next three years will get the student to proficiency. Florida will use the past two, and up to the last five, years of data for a student to determine the three-year growth trajectory. The growth trajectory slope, or rate of change, will be determined by taking the student's current year score and subtracting the first score the student earned on FCAT. The difference will be divided by the number of years represented by these two scores. This will be the average annual expected growth for this student and will be used to project if the student is on track to becoming proficient in the next three years.

Under Florida's new proposal, if a subgroup does not demonstrate AYP using Florida's status or safe harbor provisions, a growth model calculation will be applied. In this tertiary AYP calculation, each student within the subgroup with at least two years of FCAT data will be included in the denominator. The numerator will include any student in the subgroup who is proficient or "on track to be proficient" in three years or less. A school or district will meet AYP for that subgroup if the percentage of students who are proficient or "on track to be proficient" using this calculation meets or exceeds the current state annual measurable objectives (44 percent in reading and 50 percent in mathematics in 2005-06).

The proposed growth model will use the Florida Comprehensive Assessment Test (FCAT) developmental scale scores (DSS) for calculating growth. This DSS scale presents student achievement on a scale ranging from 0 to 3000 for all grade levels tested. This continuous scale allows student progress to be tracked from one tested grade to the next. To explain Florida's model further, the steps required for determining whether a student is "on track to be proficient" using Florida's developmental scale are outlined in this section and illustrated in Figure 1.

Step 1: Data from the past two and up to the last five years is collected for each individual student.

Step 2: A growth trajectory slope is determined by taking the difference between the student's current year FCAT DSS and the student's first FCAT DSS score and then dividing the difference by the number of years the student has progressed in school. The result is the growth trajectory slope, which provides the average annual expected growth for this student.

Step 3: The growth trajectory slope is then multiplied by three to determine the expected three-year growth.

Step 4: The expected three-year growth is then added to the current year DSS to find the projected DSS in three years.

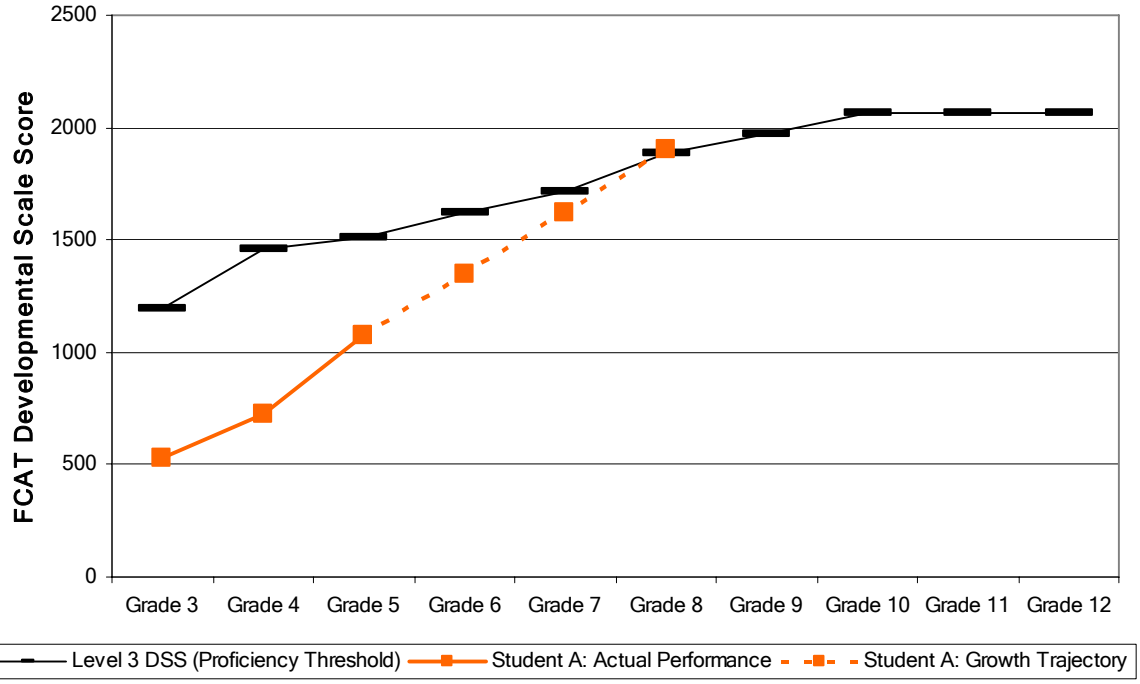
Step 5: Finally, the three-year projected DSS score is compared to the DSS required for a proficiency determination in the student's projected grade level.

Step 6: If the student's growth trajectory crosses the threshold for proficiency in three years or less, the student will be considered "on track to be proficient".

Figure 1:

"On Track to Be Proficient"

Example of a 5th Grade Student's Growth Trajectory to Proficiency



For each year a student is not proficient under the status model, the growth rate will be adjusted to include the newest year of student data in the growth trajectory.

The proposed growth model would be the third way schools and districts can meet the AYP criteria. Schools and districts will still have the option of meeting AYP criteria by using the status model (meeting the annual proficiency benchmarks) or through safe harbor (10 percent decrease in the percent of students not proficient) and, in fact, will be required to use these options for students without the two years of FCAT data required to participate in the growth model.

Core Principle #1: Florida's growth model proposal maintains Florida's high annual measurable objectives for reaching the goal of 100% student proficiency by 2013-14.

Highlights of Florida's Evidence:

- To ensure consistency in our approach to meeting the goal of 100% of students proficient by 2013-14, Florida will use the annual measurable objectives established in Florida's approved Accountability Workbook as the growth targets for use in growth model decisions.
- Florida's growth model maintains Florida's high expectations for student proficiency by including only those students who will meet or exceed the proficiency threshold in three years or less as making growth. As a result, the farther below proficiency that students initially score, the more they must improve in succeeding years in order to be on track to be proficient.
- Each AYP determination will be made by first calculating to determine if the entity made AYP using the status model. If not, then AYP will be calculated using safe harbor, and finally AYP will be calculated using the growth model. Schools and districts may make AYP with one or more subgroups meeting requirements of the status model, one or more subgroups using safe harbor, and one or more subgroups meeting the growth model requirements. All subgroups must have at least 95 percent tested, the whole school and the subgroup must meet the writing criterion, and the whole school and the subgroup must meet the graduation criterion (for high schools) to be eligible to use the safe harbor or growth model options to make AYP.
- For students in high school, the end proficiency target is proficient on the grade 10 FCAT. Students who will not be in tested grades for three more years will use the proficiency target for the last tested grade, grade 10. For the student to be on track to proficiency, the student's growth trajectory will have to demonstrate that the student is on track to be proficient on the grade 10 FCAT.

Core Principle #2: Florida's growth model proposal maintains Florida's high expectations for all students, without basing expectations upon student demographic characteristics or school characteristics.

Highlights of Florida's Evidence:

- Florida's proposed growth model ensures that the growth expectations are not set or moderated based on student demographics or school characteristics. The proficiency levels are the same

statewide based on grade level and subject (reading or mathematics). Only prior year assessment data is used to determine a student's individual growth trajectory to the proficiency standard.

- Florida's growth targets will be the predefined FCAT proficiency levels three years out from the current year. The percent of students reaching on grade level proficiency or on track to be proficient in three years will be used to assess attainment of the annual measurable objectives established in Florida's approved Accountability Workbook.

Core Principle #3: Florida's growth model proposal maintains Florida's current system of producing separate accountability decisions about student achievement in reading and in mathematics.

Highlights of Florida's Evidence:

- Florida's growth model calculations will be implemented separately for reading and mathematics. Florida will compute a growth trajectory for each student to determine if the student will reach a proficient level in three years or less in the grade the student should reach given continuous promotion. A student will have two growth trajectories and two proficiency thresholds, one for reading and one for math. Likewise, the proposed growth model will use separate determinations of meeting the AYP targets, one for reading and one for mathematics.
- The determination of whether or not a student is on track to be proficient is based only on prior year student data and the established proficiency threshold. Since there are no complex statistical procedures used, there is no measurement error or concern for empirical integrity of the accountability system. All data used in the AYP determinations are actual data, with averaged growth projections based on actual data.
- Schools that are very small or that have highly mobile populations will still have an AYP determination based on year-to-year comparisons. However, these schools may not have the opportunity to participate in the growth model component of AYP if the school does not have enough students with two years of FCAT data.

Core Principle #4: Florida's growth model proposal maintains the requirement that all students in the tested grades must be included in the assessment and accountability system.

Highlights of Florida's Evidence:

- The Florida proposal will add a growth component without changing the other components included in its approved accountability workbook, including the same status and safe harbor components. Two years of data are not required for a student to be included in the current AYP model, but will be required for the growth component. If a student does not have two years of data, the student will be included in every part of the AYP calculation, status, safe harbor, participation, and other indicators (writing and graduation rate), but will not be used in the growth model calculation if the growth model calculation is used for that school. Florida's model does not include imputing missing data as that process may introduce unnecessary error in the system. In addition, Florida is able to locate prior year data for over 99 percent of the students for whom we expect to find prior year data (i.e.,

the student was in a tested grade the prior year and attended a public school in Florida, even if it wasn't the school being evaluated for AYP).

- Florida is not including alternate assessments in the proposed growth model for the 2005-06 determinations. Approximately one percent of students take a reading alternate assessment and approximately one percent of students take a mathematics alternate assessment. A growth scale is not easily applied to the alternate assessments these students take. Although these students cannot be included in the growth model, they are still included in the status and safe harbor calculations of AYP.
- Florida will not be able to measure growth for a student who is in third grade for the first time or any student who is new to the state. All third grade and new students are included in the AYP calculation for status and safe harbor but will not be included in the growth model calculation because prior year data to develop a growth trajectory is not available.
- Florida will include all students in grades 3-10 in the AYP accountability system even if they are not included in the growth model because all students will be included in participation, status, and safe harbor, and the other indicators (writing and graduation rate).
- Growth for a student moving from one grade to the next, is retained, or promoted mid-year will be calculated the same way. Students must reach the proficiency threshold for the current tested grade for which they are enrolled. A student is required to meet the proficiency standard or "on track to be proficient" in three years based upon the grade the student is currently enrolled. A student who is retained for the full year and tested in the same retained grade may still meet proficiency or be "on track to be proficient" if the student meets the proficiency standards for that year or will meet the proficiency standard in three years or less.

▶ Core Principle #5: Florida has maintained a statewide assessment system with annual assessments in grades 3-10 in reading and mathematics since 2000-01—with proven test reliability and validity of results.

Highlights of Florida's Evidence:

- Florida has designed a standards-based assessment system in reading and mathematics for students in grades 3-10 that measures students annually. The annual assessment system for all grades 3-10 has been implemented for the past five (5) years, since 2000-01. The core components of the Florida assessment began in 1998 with the administration of tests in reading (grades 4, 8, and 10) and mathematics (grades 5, 8, and 10). With the passage of Governor Bush's A+ Plan in 1999, the assessment was expanded to grades 3-10, and reading and mathematics tests at all of these grade levels have been administered and reported since 2001, which serves as the baseline. Consistent data on student learning gains are available for the past four (4) years 2001-2002, 2002-03, 2003-04, and 2004-05.[1] The assessment of learning gains will continue in 2005-06 and into the foreseeable future.
- Florida's FCAT development scale scores (DSS), the vertical scale scores, report student scores on a scale ranging from 0 to 3000. This continuous scale begins low in third grade and reaches its

[1] The first year of Florida's contiguous grade level assessment provided annual learning gains for a few grades, but not for all grades, 3-10. Therefore, four years of growth data are available for all students and five years of growth data are available for some cohorts (those in 4th, 5th, or 9th grades in 2000-01).

maximum in tenth grade. The DSS allows student growth to be monitored from one tested grade to the next and has been reported since 2000-01.

- In 2001-02, a validation of Florida's vertical scaling methodology was conducted. The validation (replication) study resulted in similar grade-to-grade linkages and would have resulted in a similar vertical scale. The Florida Department of Education (FDOE) conducted a second validation (replication) of the vertical scale study in 2004-05 and again found the grade-to-grade linkages were similar and the resulting vertical scale changes would be minimal. The FCAT DSS will continue to be studied approximately every three years until such time as the results indicate a need to implement a differently linked scale or the assessed content changes enough to require a new scale.

Core Principle #6: Florida's accountability system and growth model proposal use the state's data system for tracking individual student progress.

Highlights of Florida's Evidence:

- Florida uses a student identification system that assigns a unique number to each student upon initial enrollment. Because the number follows the student throughout his/her academic career, Florida is able to analyze achievement data in terms of community demographic variables, school characteristics, staff characteristics, and the enacted curriculum.
- Florida's system is able to track students as they move through the state from school to school and district to district. Florida has been tracking student information for years and has developed a data warehouse to help with the process. Because of the statewide matching capability, there is virtually no difference between the subgroup match rates. Florida currently has a 99 percent plus match rate of data to the students included in AYP. This high match rate is due not only to matching students using the statewide data base, but also to the cooperation of school districts in identifying data for students who don't match initially. The FDOE identifies unmatched students for districts and schools to review before the current year test scores are reported. This process gives school and district personnel the opportunity to ensure accuracy and integrity of their data as well as provide additional information about the student that leads to an increase in the match rate.

Core Principle #7: Florida's growth model proposal includes student participation rates in the state assessment system and student achievement on an additional academic indicator.

Highlights of Florida's Evidence:

- The participation rate will be used in the AYP calculation with a growth model the same way it is currently used. Schools and districts that did not meet AYP using the status model are eligible to meet AYP using the safe harbor model only if the school and all the subgroups have tested at least 95 percent of the students in reading and mathematics. The same 95 percent tested requirement for the school and subgroups must be met for a school or district to be eligible to use the growth model to meet AYP.
- The model does not change the way Florida utilizes the other academic indicator(s). Florida will use the same rules for eligibility for safe harbor and the growth component. To reiterate, for the school to

be eligible to utilize the growth component, the school must have at least 95 percent tested in each subgroup, meet the writing criterion and graduation criterion for the whole school, as well as the subgroup using the growth calculation.

Evidence of Florida's Commitment to Closing the Achievement Gap

Florida has made a commitment to close the achievement gap. While we have made great progress, there is still much more to be made. In the spirit of developing a growth model to demonstrate schools making adequate yearly progress and closing the achievement gap, Florida is proposing, in addition to the growth model, an improvement model to emphasize the importance of closing the achievement gap. Details of this new proposal are provided beginning on page 8.

The FCAT results released in 2005 continued the trend of rising student achievement in Florida. The greatest improvements over 2004 continued to be in reading among elementary grades, with 69 percent of third, fourth, and fifth grade students reading at or above grade level, compared to 55 percent in 2001.

From 2001 to 2005, Florida students have shown significant progress in both reading and mathematics. Last year, the achievement gap for minority students continued to narrow with both Hispanic and African American students improving nearly twice as fast in FCAT reading and three times as fast in FCAT mathematics as their white counterparts (see Figures 2 and 3). These data are based on the percentage of students scoring at and above the proficient level (Level 3 on FCAT). The same criteria used in the current AYP model. There are five categories of achievement that describe the success students have with the content tested on FCAT reading and mathematics. Level 5 is the highest and Level 1 is the lowest. Levels 3 and above are considered on or above grade level.

Figure 2:
Reading FCAT, Grades 3-10, Percent Level 3 and Above

	2001	2002	2003	2004	2005
White	59%	60%	63%	63%	64%
African American	25	28	30	32	35
Hispanic	35	38	40	42	46
All Students	46	48	50	51	53

Figure 3:
Math FCAT, Grades 3-10, Percent Level 3 and Above

	2001	2002	2003	2004	2005
White	60%	64%	67%	68%	70%
African American	25	28	31	34	37
Hispanic	39	42	46	49	54
All Students	48	51	53	56	59

Additional Proposal: AYP Improvement Model for Closing the Achievement Gap in Florida

Florida is proposing an additional component that will examine if schools are making standout improvements in closing the achievement gap. The closing the gap improvement component examines subgroups that did not meet AYP via the other methods, status, safe harbor, or growth, but have closed the gap on state proficiency by improving the percent of proficient students in the subgroup by more than the state average. This enhancement will recognize the efforts schools are making to improve (reduce) the achievement gap.

The following examples illustrate how the closing the gap component would be applied.

- In 2003-04, 52 percent of students in Florida's state AYP calculation were proficient in reading, in 2004-05 that percent proficient improved to 53 percent. For a subgroup to utilize the reading improvement calculation, the subgroup must have at least two percent improvement in reading over the prior year.
- In 2003-04, 56 percent of students in Florida's state AYP calculation were proficient in mathematics, in 2004-05 that percent proficient improved to 59 percent. For a subgroup to utilize the mathematics improvement calculation, the subgroup must have at least 4 percent improvement in mathematics over the prior year.

Impact of the Florida Growth Model Proposal on AYP Status

The impacts of the proposed changes to Florida's AYP determinations are shown in the table below. The proposed additions to the AYP model will result in only 211 more schools making AYP in 2005-06 than in 2005, approximately 7 percent of all schools.

AYP Determination	Yes	No
2005 AYP Results Status and Safe Harbor **(No Growth Model)** Reading 37% and Mathematics 44%	1116	1987
2006 Projected AYP Results Based on 2004-05 data, Status and Safe Harbor **(No Growth Model)**, Reading 44% and Mathematics 50%	916	2193
2006 Projected AYP Results – Adding Growth Based on 2004-05 data, Status and Safe Harbor and Growth Model, Growth Model = On Track to be Proficient in Three Years, Reading 44% and Mathematics 50%	1237	1872
2006 Projected AYP Results – Adding Closing the Gap Based on 2004-05 data, Status and Safe Harbor and Growth Model, Growth Model, Improvement Model = Closing the Gap on State Level Proficiency, Reading 44% and Mathematics 50%	1327	1782

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